

**Work Order ID 68988**

Wednesday, April 27, 2011 8:48:19 AM



Page 1

Item ID: D3195-043

Revision ID:

Item Name: Bracket Assembly

Start Date: 4/26/2011 Start Qty: 4.00

Required Date: 5/2/2011 Req'd Qty: 4.00

Reference:

Approvals:

Process Plan:

Date: 1/04/27

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr	Revision Nbr
D3195	Rev A

100



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: (1.250" x 1.500") x 3.60" long

SL 11/05/09

(4)

110



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine D3195-3 as per Folio FA334 and Dwg D3195 Identify as D3195-  
3□2-Deburr

SL 11/05/09

(4)

120



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

SL 11/05/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 68988**

Wednesday, April 27, 2011 8:48:19 AM



Page 2

Item ID: D3195-043

Accept



Setup Start



Revision ID:

Item Name: Bracket Assembly

Stop



Start Date: 4/26/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 5/2/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC8- Inspect parts - second check

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

QC

Quality Control

Memo

0.00

PQ 11.5.10

140



Chemical Conversion Coat per QSI005 4.1

0.00

HandFinish

Hand Finishing

Memo

0.00

4x Ø m-f 11/05/10

150



Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

Powdercoat

Powder Coating

Memo

10:30 0.00

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

11:00

M 115128

4x Ø m-f 11/05/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 68988**

Wednesday, April 27, 2011 8:48:19 AM



Page 3

Item ID: D3195-043

Accept



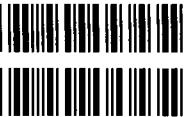
Setup Start



Revision ID:

Item Name: Bracket Assembly

Stop



Start Date: 4/26/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 5/2/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

*4/27/10*

170

Small Fab

0.00

Small Fab

Memo

0.00

Small Fab

1-Lightly Sand bonding surface  2-Bond D3195-7 into D3195-13as per Dwg  
D3195  A/R Contact Cement 4/11/095*4/11/10*

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

*4/11/11**4/11/11*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 68988**

Wednesday, April 27, 2011 8:48:19 AM



Page 4

Item ID: D3195-043

Accept



Setup Start



Revision ID:

Item Name: Bracket Assembly

Stop



Start Date: 4/26/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 5/2/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
Description

190

Identify as per dwg & Stock Location: 2460ASet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Packaging

Memo

0.00

11/5/11 SP (4)

Packaging

200



QC21- Final Inspection - Work Order Release

0.00

QC

Quality Control

Memo

0.00

11/5/11 QDJK11-09-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Wednesday, April 27, 2011 8:56:34 AM

Page 1

Work Order ID: 68988



Parent Item: D3195-043



Parent Item Name: Bracket Assembly

Start Date: 4/26/2011

Required Date: 5/2/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 05-11-08 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3195-7 		Manufactured	No			100	Each	3.0000	1	4			
-------------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

Pad

Location	Loc Qty	Loc Code
GA	3	
64534	3	

M6061T6B1.500X01.25 0 	Purchased	No			170	f	14.2068	0.3	1.263158			
------------------------------	-----------	----	--	--	-----	---	---------	-----	----------	--	--	--

6061-T6 Bar 1.50 x 1.25

Location	Loc Qty	Loc Code
MAT004	14.2068	
107461	0.9	
110936	13.3068	

4/25/11/05/10

B 69385 (1K)

3

SL 10505

1265

✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	68988
Description: Bracket	Part Number:	D3195-3
Inspection Dwg: D3195	Rev: A	Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

## X First Article      Prototype

Measured by:	SL	Audited by:	DP	Prototype Approval:	N/A
Date:	11/5/09	Date:	11/5/10	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.04.20	New Issue (P/O D412-702-011/-013)	KJ/RF	<i>[Signature]</i>
B	05.04.26	R0.37 was R0.037; 1.084 removed	KJ/JLM	<i>[Signature]</i>

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date &amp; initial all entries

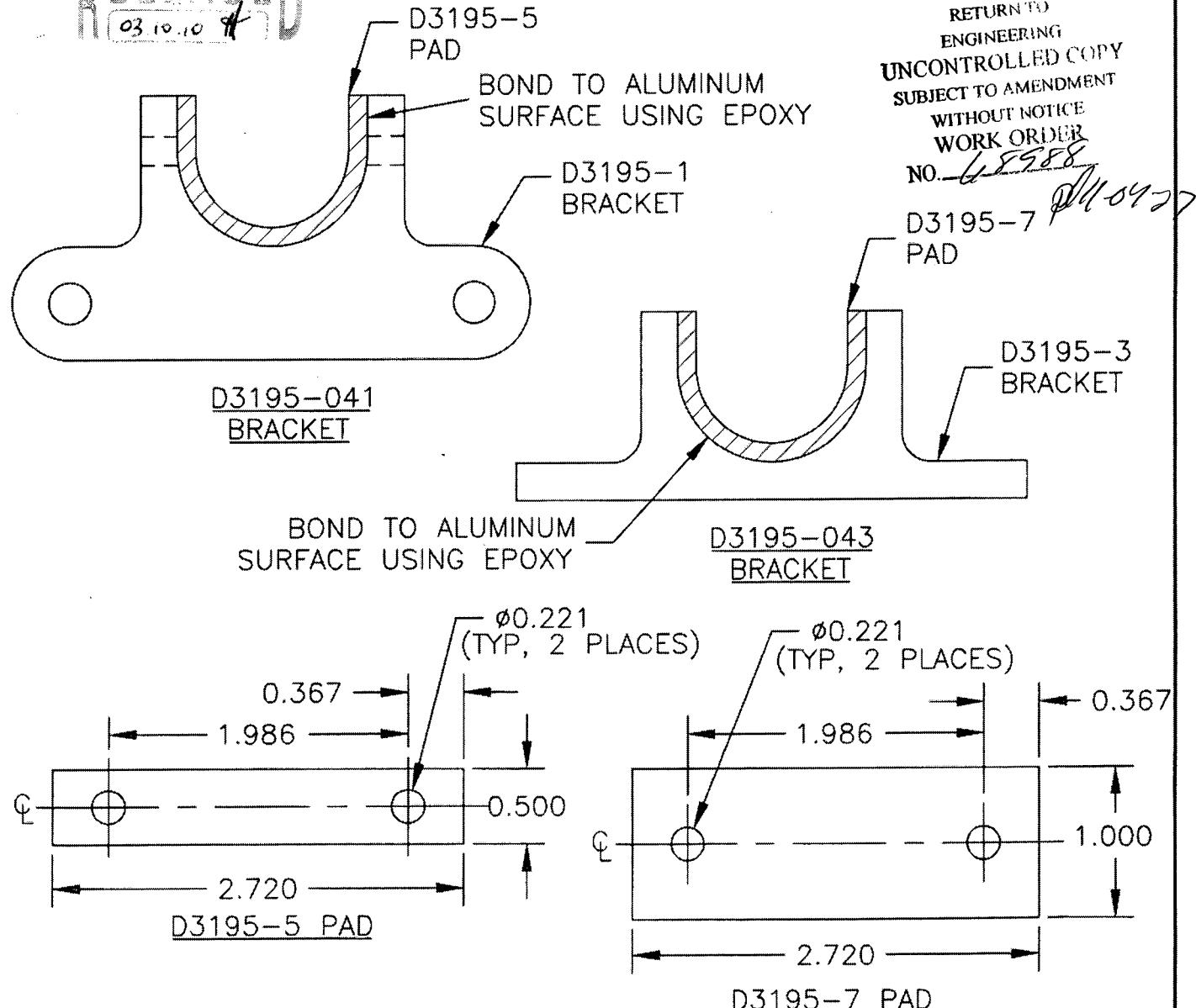


COPY ISSUED  
03.06.23

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3195
DATE	TITLE	REV. A
03.06.23	BRACKET	SHEET 1 OF 3
		SCALE 1:1
A	03.06.23	NEW ISSUE

RELEASED  
03.10.10

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 68988 04/09/07



#### D3195-5 & D3195-7 PAD

- 1) MATERIAL: 60 DUROMETER NEOPRENE 1/8" THICK  
(POSSIBLE SUPPLIERS, ACCURATE RUBBER)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 3) ALL DIMENSIONS ARE IN INCHES

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B				Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

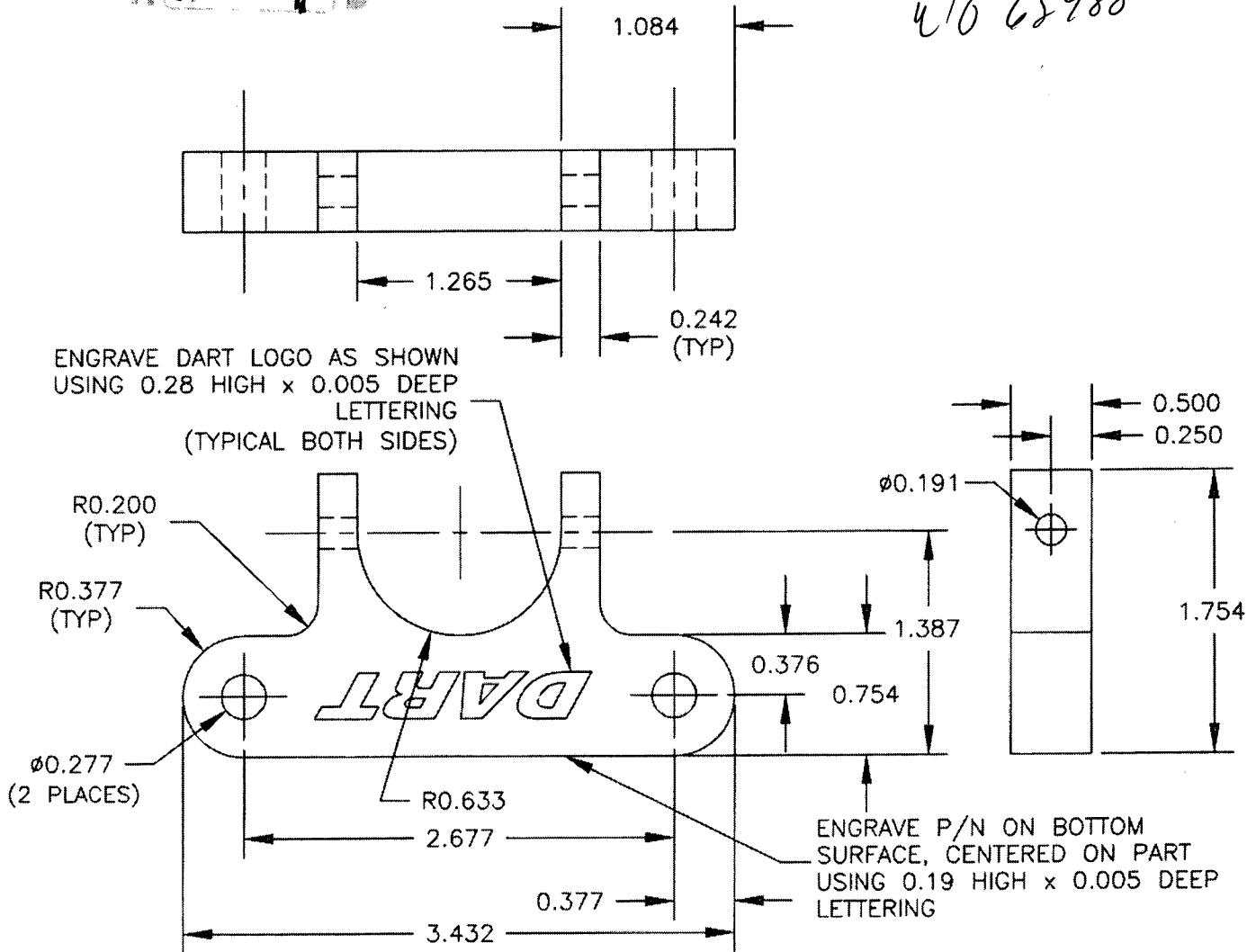
NOTE: Date & initial all entries



DESIGN	DP	DRAWN BY	DP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	MM	APPROVED	MM	DRAWING NO. D3195 REV. A
DATE	03.06.23	TITLE	BRACKET	SCALE 1:1

RELEASED  
03.10.10

4/6 68988



#### D3195-1 BRACKET

- 1) MATERIAL: 6061-T6/T651 (QQ-A-250/11 OR QQ-A-200/8 OR QQ-A-225/8)  
(REF. DART SPEC M6061T6S OR M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

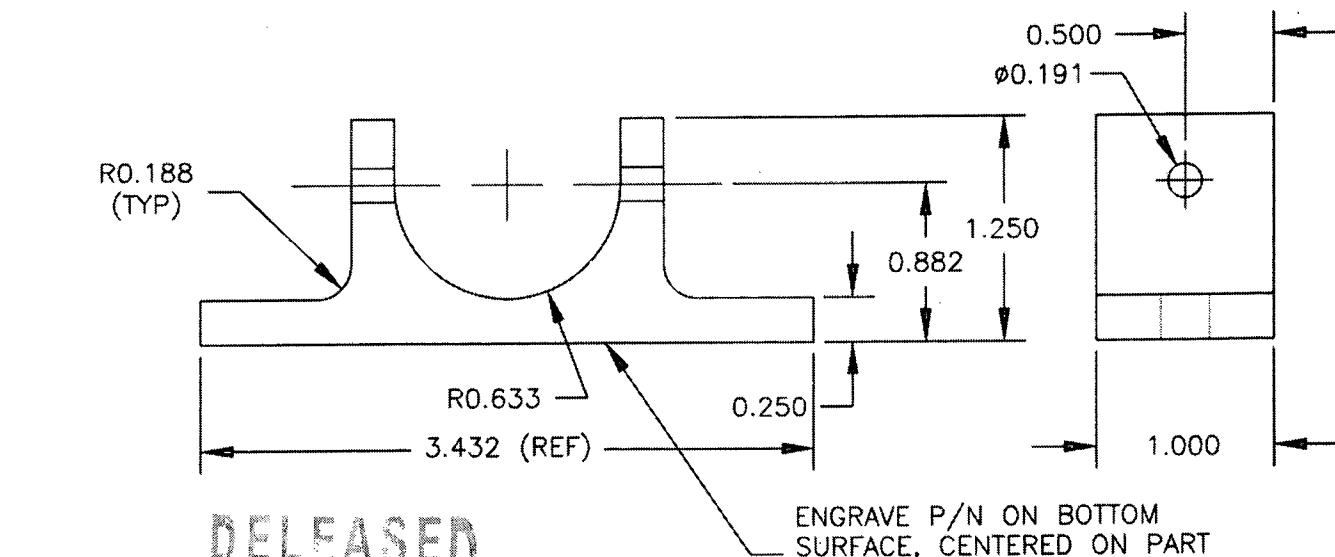
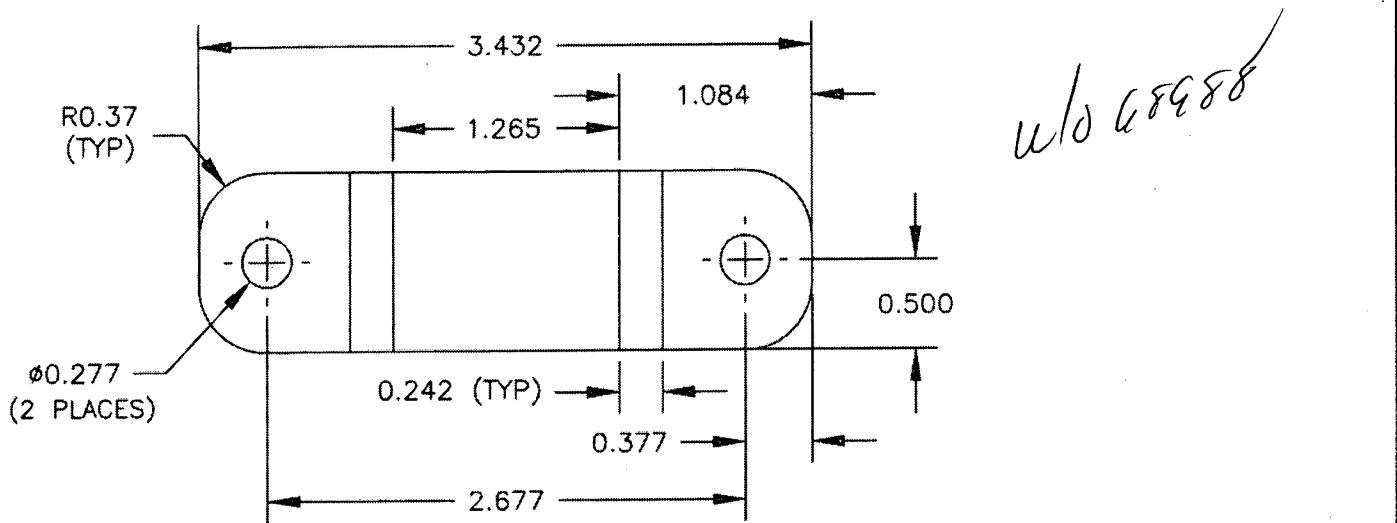
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date &amp; initial all entries



1 COPY /ISSUE  
0

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3195 REV. A SHEET 3 OF 3
DATE	TITLE	SCALE 1:1



RELEASED  
03-01-10

D3195-3 BRACKET

- 1) MATERIAL: 6061-T6/T651 (QQ-A-250/11 OR QQ-A-200/8 OR QQ-A-225/8)  
(REF. DART SPEC M6061T6S OR M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries